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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,802	03/26/2007	Fritz-Peter Pleschiutchnigg	HM-675PCT	7340
40570	7590	10/14/2010		
Lucas & Mercanti LLP 475 Park Avenue South New York, NY 10016			EXAMINER MCGUTHRY BANKS, TMA MICHELE	
			ART UNIT	PAPER NUMBER
			1733	
			MAIL DATE	DELIVERY MODE
			10/14/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,802	Applicant(s) PLESCHIUTSCHNIGG ET AL.	
	Examiner TIMA M. MCGUTHRY-BANKS	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of Claims

Claims 1 is currently amended, Claims 2-12 are as previously presented and Claims 13-19 are cancelled.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 6-9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutchnigg et al (US 5,991,991) in view of Pleschiutchnigg et al (US 5,832,985), Mabuchi et al (US 6,096,137), JP 406100949 A and Bogan et al (US 5,228,902).

Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi et al and JP '949 A is applied as discussed in the office action mailed 4/27/2009. However, Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi et al and JP '949 A does not teach process route (a).

Bogan et al teaches desulfurization of steel being vacuum treated in a vacuum degassing unit such as an RH degasser (column 1, lines 8-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method of degassing molten steel with the process of Pleschiutchnigg et al '991 to achieve a desired final microstructure, since Bogan et al teaches avoiding expenses and other difficulties with specialized equipment (column 3, lines 12-15).

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Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutschnigg et al '991 in view of Pleschiutschnigg et al '985, Mabuchi et al, JP '949 A and Bogan et al as applied to claim 1 above, and further in view of JP 2000-087128 (Derwent abstract) and JP 10130713 (Derwent abstract).

This rejection is for substantially the same reasons as set forth in the Office action mailed 4/27/2009.

Claims 1 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutschnigg et al '991 in view of Pleschiutschnigg et al '985, Mabuchi et al, JP '949, Pleschiutschnigg et al (US 2003/0230163) and Rose et al (US 6,238,453 B1).

Pleschiutschnigg et al '991 in view of Pleschiutschnigg et al '985, Mabuchi, and JP '949 is applied as discussed in the office action mailed 5/18/2010.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutschnigg et al '991 in view of Pleschiutschnigg et al '985, Mabuchi et al, JP '949, Pleschiutschnigg et al '163 and Rose et al as applied to claim 1, and further in view of JP '713.

Pleschiutschnigg et al '991 in view of Pleschiutschnigg et al '985, Mabuchi et al, JP '949, Pleschiutschnigg et al '163, Rose et al. and JP '713 are applied as discussed in the Office Action mailed 4/27/2009.

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Claims 1, 4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi et al, JP '949, and Gero (US 3,523,785).

Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi, JP '949 and Gero is applied as discussed in the office action mailed 5/18/2010.

Claims 1 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi et al, JP '949, and Keilman et al (US 4,390,362).

Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi, JP '949 and Keilman et al is applied as discussed in the office action mailed 5/18/2010.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi et al, JP '949 and Bogan et al, Pleschiutchnigg et al '163 and Rose et al, Gero or Keilman et al as applied to claim 1 above, and further in view of Cornet et al (US 6,821,356 B2).

Pleschiutchnigg et al '991 in view of Pleschiutchnigg et al '985, Mabuchi et al, JP '949 and Bogan et al, Pleschiutchnigg et al '163 and Rose et al, Gero or Keilman et al and Cornet et al is applied as discussed in the office action mailed 4/27/2009.

Response to Arguments

Applicant's arguments filed 9/20/2010 have been fully considered but they are not persuasive. Applicant argues that none of the references provides any teaching of a method that includes the steps of providing a plurality of specific process routes for producing molten steel, and selecting one of the process routes from the plurality of routes provided, according to a desired final microstructure. The examiner notes applicant's argument with respect to *KSR*. In this case, each of the elements in Claim 1 are not only independently known in the prior art but also in combination, as evidenced by the ASM Handbook (see "Steelmaking", pages 1-5 and 10-12). It is further noted that the instant claims utilize the process routes in the alternative, i.e. independent claim 1 indicates selecting a process route from among (a) through (d) as defined in that claim, and the process routes themselves are each alternatively recited with the word "or" at the end of each of (a) (b) and (c). Thus, a disclosure of any one of the claimed process routes in the prior art meets the limitations of claim 1. The limitation "a desired microstructure" does not define any specific microstructure; it can refer to any microstructure desired by the artisan such as those achieved in the methods of the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMA M. MCGUTHRY-BANKS whose telephone number is (571)272-2744. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Wyszomierski/
Primary Examiner
Art Unit 1793

/T. M. M./
Examiner, Art Unit 1733
13 October 2010